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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,619	05/09/2001	N. Convers Wyeth	SAIC0042	4107

27510 7590 02/25/2003

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/851,619

Applicant(s)

Wyeth

Examiner

Lincoln Donovan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 11, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above, claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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## DETAILED ACTION

### *Election/Restriction*

1. Claims 1-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claimed invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 7.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 16-20, 24, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolaides [US 3,918,032] in view of Nunoshita et al. [US 4,092,060].

Nicolaides discloses a switching circuit [figure 1] comprising:

- a substrate [10] for supporting components of the circuit; and
- at least one switch [abstract] having:
  - a first and second conductive elements [figures 1-2] on the substrate;
  - a switch element formed of chalcogenide [column 3, line 39-column 4, line 47]

connecting the first and second conductive elements, the switching material exhibiting a bi-stable

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phase behavior and switchable between first and second impedance states [column 3, lines 55-60] by application of energy thereto [column 3, lines 45-50].

Nicolaides disclose the instant claimed invention except for the switching circuit being used to switch electromagnetic waves.

Nunoshita et al. discloses a thin film optical switch [figure 2] using a phase change impedance switching material [column 4, line 53-column 5, line 9].

It would have been obvious to one having ordinary skill in the art at the time the invention was made that the switch design of Nicolaides could have been used for switching electromagnetic waves as suggested by Nunoshita et al.

Nunoshita et al. further discloses an additional lead [18] providing an energy source to a switch.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an additional lead to provide an energy source to the switch of Nicolaides, as suggested by Nunoshita et al., for the purpose of providing switching control.

The specific conductor configuration would have been an obvious design consideration based on the desired switching characteristics.

4. Claims 21-23, 25 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolaides, as modified, as applied to claim 16 above, and further in view of Gonzalez et al. [US 3,691,688].

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Nicolaides, as modified, disclose the instant claimed invention except for a plurality of switches used in an array configuration.

Gonzalez et al. discloses an array of chalcogenide type switches.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a plurality of switching elements into an array, as suggested by Gonzalez et al., for the purpose of providing multiple switching configurations.

Gonzalez et al. further shows the chalcogenide being commonly formed of Ge-Sb-Te.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Ge-Sb-Te for the Chalcogenide of Nicolaides, as modified, in order to use a well known material that exhibits the desired characteristics.

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111.

The fax number for this Group is (703)-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

LDD

February 22, 2003

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LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100